REMARKS

Claims 10-16, 24, 26-28 and 31 are pending. Claims 11, 15 and 16 have been canceled. Claims 1-9, 18-23, 29-30, 35 have been withdrawn from consideration. Claims 10 and 12 have been amended. The limitations formerly in canceled claims 11, 15 and 16 have been incorporated into claim 10. The limitation from the last two lines of claim 31 has also been added to claim 10. Claim 12 has been amended by making it independent and incorporating the limitations in claim 10 (before it was amended) from which claim 12 had depended. Entry of the amendments and reconsideration of the application are requested.

Claims 10, 11, 15 and 16 have been separately rejected under 35 USC § 103(a) as being obvious over Pelzer U.S. Patent 4,145,173 or Barstow U.S. Patent 3,289,632. These two rejections are discussed together because the limitations from canceled claims 11, 15 and 16 have been incorporated into amended claim 10. The rejection has been avoided by the amendments to claim 10.

There are substantial differences between amended claim 10 and the two cited patents. Claim 10 now requires that:

1. there be a forward row and a rearward row of fasteners behind the internal manifold of the die coater, and part (a) of the claim requires that each fastener extends through the first die block into the second die block. Of the two cited patents, only Barstow (bolts 6) meets these criteria. Office action page 3 notes that Pelzer Fig. 3 shows fasteners located behind the internal manifold, but there is just one such fastener, not pairs (one forward and one rearward). Pelzer says (column 4, lines 33-34) that his gap 60 is adjusted by screws 38 which are forward of distributing channel 8.

2. O_F (distance between forward fastener and internal manifold) is approximately the same as O_B (distance between rearward fastener and die back surface). Office action page 4 says that, "the fasteners of Barstow are comprised of forward and rearward fasteners which are positioned in the die such that O_F and O_B is within the scope of the claim." This assertion is specifically traversed, and the examiner is requested to withdraw it, as it has no basis in Barstow.

3. the cube of the ratio of overhang to thickness of the first die block is less than about 9 (a limitation formerly in claim 16)

4. the quantity defined by the cube of the ratio of the overhang/thickness divided by the modulus of elasticity of the first die block is less than about $3.0 \times 10^{-7} in^2/lb$ ($4.35 \times 10^{-5} MPa^{-1}$).

The combination of above limitations 2-4 is not found in either cited patent and is shown in Example 1 of the present specification to be associated with a benefit of this invention (substantially lower total indicated runout (TIR) of the die slot profile). The inventive embodiments (C and D) in Table 1 showed TIR of 30 and 20 microinches respectively compared with 90 – 180 microinches for dies in which O_F and O_B were different, $(\text{overhang/top thickness})^3 \geq 9$, and $(\text{overhang/top thickness})^3/E > 3 \times 10^{-7} in^2/lb$. This combination of limitations on the construction of the claimed die coater has yielded a benefit in die slot uniformity not foreseen in the prior art. Pelzer mentions a tolerance of less than 0.01 mm (column 3, line 33) which is 10μm. This is quite different from the TIR achievable with the invention of claim 10 (20 – 30 microinches or 0.508 – 0.76 μm, or more than an order of magnitude better).

With respect to amended claim 10, the modifications to the cited patents necessary in order to arrive at the amended claim are too great to be obvious to one of ordinary skill.

The objection to claims 12-14 has been avoided by the amendment to claim 12 that incorporates the limitations formerly in claim 10.

In view of the above discussion, claims 10, 12-14, 24, 26-28 and 31, as amended, are in condition for allowance. Withdrawal of the rejections under 35 U.S.C. 103(a) is requested and a notification of allowability is respectfully solicited. If any questions or issues remain, the resolution of which the Examiner feels would be advanced by a conference with applicant's attorney, she is invited to contact such attorney at the telephone number noted below.

Respectfully submitted,

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